## **MAJOR: Physics (MJD-PHYSC) – Semester 1 start** 10 x Core units 2 x Option units

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **YEAR 1** | SEM 1 | **MATH1011: Multivariable Calculus\*\***pre-req: ATAR MATH Specialist or MATH1722 | **PHYS1001: Physics for Scientists & Engineers\*\***pre-req: ATAR MATH Methods or MATH1721ANDATAR Physics or PHYS1030 | **CITS1401: Computational Thinking with Python\*\*** pre-req: ATAR MATHS Methods or MATH1721 | **ELECTIVE** |
| SEM 2 | **MATH1012: Mathematical Theory and Methods\*\***pre-req: ATAR MATH Specialist or MATH1722 | **PHYS1002: Modern Physics\*\***pre-req: PHYS1001 | **ELECTIVE** | **ELECTIVE** |
| **YEAR 2** | SEM 1 | **PHYS2001: Quantum Physics and Electromagnetism** pre-req: PHYS1001, PHYS1002 AND MATH1011 | **MATH2501: Advanced Mathematical Methods**pre-req: MATH1011 | **ELECTIVE** | **ELECTIVE** |
| SEM 2 | **PHYS2002: Many Particle Systems**pre-req: PHYS1001, PHYS1002 AND MATH1011 | **Level 3 Option PHYS3011: Mathematical Physics** pre-req: PHYS2001 AND MATH2501co-req: PHYS2002**OR ELECTIVE**Complete ELECTIVE here if intending to take L3 Option unit in Year 3, Sem 2.  | **ELECTIVE** | **ELECTIVE**Level 2/3 |
|  **YEAR 3** | SEM 1 | **PHYS3001: Quantum Mechanics and Atomic Physics**pre-req: PHYS2001 AND MATH2501 (OR MATH3023) | **Level 3 Option**e.g. PHYS3003 or PHYS3005 | **ELECTIVE**Level 2/3 | **ELECTIVE**Level 2/3 |
| SEM 2 | **PHYS3002: Electrodynamics and Relativity**pre-req: PHYS2001, PHYS2002 AND MATH2501(OR MATH3023) | **ELECTIVE**If PHYS3011 was taken in Sem 2, Year 2, complete a Level 2/3 ELECTIVE here.**OR Level 3 Option**Otherwise, complete a Level 3 Option here (e.g. PHYS3011 or PHYS3012)  | **ELECTIVE**Level 2/3 | **ELECTIVE**Level 2/3 |

\*\* Unit is available in Semester 1 and Semester 2

**NOTES**

* Course details are in the Handbook. For example: Bachelor of Science rules are here: <https://handbooks.uwa.edu.au/coursedetails?code=bp004#rules>
* MJD-PHYSC Physics major overview and unit details can found here: <https://handbooks.uwa.edu.au/majordetails?code=MJD-PHYSC#units>
* Plan ahead! Look at prerequisite requirements in the Handbook. For example: Level 3 option unit PHYS3003 requires pre-requisite units PHYS2001, PHYS2002 AND MATH2501
* Information about unit availability should be checked at the beginning of each semester and can be found at [timetable.uwa.edu.au](http://www.timetable.uwa.edu.au/) and [Handbooks](https://handbooks.uwa.edu.au/)
* If studying both MATH1011 and MATH1012 – the School recommends attempting these in different semesters.

## **MAJOR: Physics (MJD-PHYSC) – Semester 2 start** 10 x Core units 2 x Option units

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **YEAR 1** | SEM 2 | **MATH1011: Multivariable Calculus\*\***pre-req: ATAR MATH Specialist or MATH1722 | **PHYS1001: Physics for Scientists & Engineers\*\***pre-req: ATAR MATH Methods or MATH1721ANDATAR Physics or PHYS1030 | **CITS1401: Computational Thinking with Python\*\*** pre-req: ATAR MATHS Methods or MATH1721 | **ELECTIVE** |
| **YEAR 2** | SEM 1 | **MATH1012: Mathematical Theory and Methods\*\***pre-req: ATAR MATH Specialist or MATH1722 | **PHYS1002: Modern Physics\*\***pre-req: PHYS1001 | **ELECTIVE** | **ELECTIVE** |
| SEM 2 | **PHYS2002: Many Particle Systems**pre-req: PHYS1001, PHYS1002 AND MATH1011 | **ELECTIVE** | **ELECTIVE** | **ELECTIVE** |
|  **YEAR 3** | SEM 1 | **PHYS2001: Quantum Physics and Electromagnetism** pre-req: PHYS1001, PHYS1002 AND MATH1011 | **MATH2501: Advanced Mathematical Methods**pre-req: MATH1011 | **ELECTIVE** | **ELECTIVE**Level 2/3 |
| SEM 2 | **PHYS3002: Electrodynamics and Relativity**pre-req: PHYS2001, PHYS2002 AND MATH2501(OR MATH3023) | **Level 3 Option**e.g. PHYS3011 or PHYS3012 | **ELECTIVE**Level 2/3 | **ELECTIVE**Level 2/3 |
| **YEAR 4** | SEM 1 | **PHYS3001: Quantum Mechanics & Atomic Physics**pre-req: PHYS2001 AND MATH2501 (OR MATH3023) | **Level 3 Option**e.g. PHYS3003 or PHYS3005 | **ELECTIVE**Level 2/3 | **ELECTIVE**Level 2/3 |

\*\* Unit is available in Semester 1 and Semester 2

**NOTES**

* Course details are in the Handbook. For example: Bachelor of Science rules are here: <https://handbooks.uwa.edu.au/coursedetails?code=bp004#rules>
* MJD-PHYSC Physics major overview and unit details can found here: <https://handbooks.uwa.edu.au/majordetails?code=MJD-PHYSC#units>
* Plan ahead! Look at prerequisite requirements in the Handbook. For example: Level 3 option unit PHYS3003 requires pre-requisite units PHYS2001, PHYS2002 AND MATH2501
* Information about unit availability should be checked at the beginning of each semester and can be found at [timetable.uwa.edu.au](http://www.timetable.uwa.edu.au/) and [Handbooks](https://handbooks.uwa.edu.au/)
* If studying both MATH1011 and MATH1012 – the School recommends to attempt these in different semesters.

# Choose a degree-specific major

# Make sure your study plan includes:

You must complete at least one degree-specific major. Make sure you include core units and option units.

# Include foundation units (if applicable)

You must complete any foundation units required for your degree. Foundation units are compulsory, regardless of your choice of degree-specific major. Check your course rules to see if foundational units are required for your course.
Bachelor of Science does not have foundation units.

# Include bridging units (if applicable)

You may be required to complete bridging units if you have not completed the pre-requisite ATAR-level study (or equivalent qualification) for your major/s.
Bridging units may include:
MATH1721 Mathematics Foundations: Methods – equivalent to ATAR Math Methods
MATH1722 Mathematics Foundations: Specialist – equivalent to ATAR Math Specialist
PHYS1030 Physics Bridging Unit – equivalent to ATAR Physics

# Choose a second major or minor (optional)

You can complete a second major or minor from any degree area as long as you meet the prerequisites. It is not compulsory to choose a second major or minor, but specialising in a second discipline will add to your qualification and employment prospects.
<handbooks.uwa.edu.au/search/?type=majors><handbooks.uwa.edu.au/search/?type=minors>

Recommended second majors for Physics: Computer Science, Data Science, Maths & Stats, Chemistry or Geology

**HELP!**Refer to the UniStart website for your step-by-step guide on planning your enrolment: <uwa.edu.au/unistart> For other questions find ‘FAQs’ and ‘Email Us’ in askUWA: [ask.uwa.edu.au](https://ipoint.uwa.edu.au/)

# Choose electives

Once you’ve included all the units for your majors, minors, foundational units, bridging units and broadening requirements you may have space for electives. Electives can be chosen from any units offered in your course, subject to unit rules. View the list: <handbooks.uwa.edu.au/undergraduate/electives>

* + a total of 24 units
	+ no more than 12 **Level 1** units (96 credit points)
	+ at least 3 **Level 3** units (18 credit points)

This is based on the Bachelor of Science (BP004) three-year degree. Students in a four-year or combined-degree should refer to their program’s course rules.

Full details of course structure and rules can be found in the Handbook:

<handbooks.uwa.edu.au/undergraduate>

**TIP:** Level 1 electives can be taken at any time during your degree as long as you do not exceed the maximum Level 1 limit. Similarly, Level 3 units can be taken earlier in your degree, so long as you meet unit prerequisites.

# Enrol on studentConnect and plan your timetable on the Class Allocation System

* studentConnect: <student.uwa.edu.au/course/studentconnect>
* Class Allocation System (CAS): <cas.uwa.edu.au>

  CRICOS: 00126G | PRV12169, Australian University

A standard full-time study load is four units per semester. All units have a value of six points unless otherwise stated. To check that you’re on track to meet your course requirements use the My Course Study Plan Checklist or get your study plan checked by a student advisor in your assigned Student Advising Office (displayed on studentConnect). First-year students who are unsure which major/s they want to study are advised to fill out the My First Year Study Plan & Checklist. Information in this study plan is correct at the time of publication and is subject to change from time to time. The University reserves the right to change the unit availability and unit rules, please refer to the Handbook each semester.